

ABSTRACT

Thin elongated bamboo chips are produced and then are softened and dried. The softening of the chips reduces void spaces which uses less glue and produces stronger members. The chips are then joined together with glue under pressure to form a bamboo board. By varying the depth and length of the chip form, the member produced can form a board, chipboard, beams, or columns of any size. Additional boards may be produced and glued together to form a larger board, beam, or column. Several chipboard layers fabricated in large sheets and glued together will form 'multi-ply bamboo', a bamboo substitute for plywood. Once cured, the member is kiln dried and sealed for moisture. The resulting bamboo member's strength and geometrical form is stable and consistent enough to be used as a structural grade member for frames, homes, buildings, and furniture.